(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 12 January 2006 (12.01.2006)

PCT

(10) International Publication Number WO 2006/004289 A1

(51) International Patent Classification⁷:

H04B 1/40

(21) International Application Number:

PCT/KR2005/000925

- (22) International Filing Date: 30 March 2005 (30.03.2005)
- (25) Filing Language:

Korean

(26) Publication Language:

English

- (30) Priority Data: 20-2004-0009176 2 April 2004 (02.04.2004) KI
- (71) Applicant (for all designated States except US): SOLI-TONIX CO., LTD. [KR/KR]; #8, 28FL., Techno-mart, Guui-dong, Gwangjin-gu, Seoul 143-200 (KR).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): NA, Kyung Min [KR/KR]; 403, Richvillart, 593-2, Guui3-dong, Gwangjin-gu, Seoul 143-203 (KR).
- (74) Agent: WON, Eun Sup; #501, Nambu BLDG., 827-20, Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).

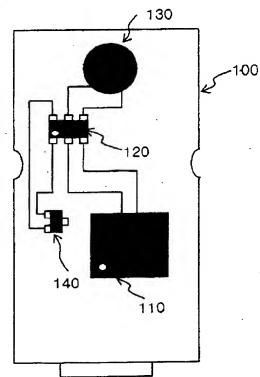
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: CIRCUIT BOARD FOR MOBILE COMMUNICATION TERMINAL HAVING ULTRASONIC WAVE SPEAKER SYSTEM



(57) Abstract: Disclosed is a mobile communication terminal board having an ultrasonic speaker system which can be used without any separate additional device during a viewing of a sky-wave broadcast or during a video calling and which can be free from an echo phenomenon. The mobile communication terminal board includes a baseband chip for processing audio data, an ultrasonic drive chip for receiving and modulating a signal output from the baseband chip to an ultrasonic band signal, and an ultrasonic speaker for outputting the ultrasonic signal output from the ultrasonic drive chip to an outside.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.